

Work Order ID 119061

Wednesday, May 07, 2014 1:15:13 PM

119061

Page 1

Item ID: D412-702-343

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 5/16/14 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plans JP Date: 14-05-07 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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FB

Draw Nbr	Revision Nbr
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DSI9511	A
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100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork		Photocopy bluefile & type labels per PPP D412-702-343 CHG001							

DAS
06
1-89
MAY 15 2014

105	Pick Kit	0.00							
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105									
Packaging	Memo	0.00							

Packaging

DAS
33
9-89
14-05-14

110	QC4- 100% Inspect kits for completeness	0.00							
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110									
QC	Memo	0.00							

Quality Control

DAS
06
9-89
MAY 15 2014

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Crosstube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 119061

Wednesday, May 07, 2014 1:15:13 PM

119061

Page 2

Item ID: D412-702-343

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 5/16/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Packaging	0.00				1			
120									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-702-343								
	Location: <u>843</u>								
	PPP Rev: <u>843</u>								
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.00							
Quality Control									

MAY 16 2014 DAS
06
9-89

14/5/2014

H 4-5-16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

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Page 1

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D412-702-301 *D412-702-301* Harness Assembly		Manufactured	No			105	Each	3.0000	1	1		DAS 33 9-89	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST268A				3					
				107263				1					
				114251				2					
D412-702-303 *D412-702-303* Harness Assembly		Manufactured	No			105	Each	3.0000	1	1		DAS 33 9-89	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				st268				2					
				113309				2					
				ST268A				1					
				107282				1					
D412-702-305 *D412-702-305* Harness Assembly		Manufactured	No			105	Each	2.0000	1	1		DAS 33 9-89	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST268A				2					
				106891				1					
				113822				1					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

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Page 2

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

D412-702-307

Manufactured No

105 Each

2.0000

Start Qty: 1.00

Required Qty: 1.00

D412-702-307

Harness Assembly

DAS
06
9-89

Location

Loc Qty

Loc Code

ST268A

2

104560

1

113727

1

104560

D412-702-309

Manufactured No

105 Each

2.0000

1

D412-702-309

Harness Assembly

DAS
06
9-89

Location

Loc Qty

Loc Code

ST263

2

106059

1

113653

1

113653

D412-702-059

Manufactured No

105 Each

4.0000

1

D412-702-059

Grommet

DAS
06
9-89

Location

Loc Qty

Loc Code

PKG12

4

106158

2

106801

1

107299

1

106158

D3761-1-041

Manufactured No

105 Each

19.0000

5

D3761-1-041

Hook & Loop Strip

DAS
06
9-89

Location

Loc Qty

Loc Code

ST244

19

106880

7

108631

12

106880

DAS
33
9-89

14-05-14

DAS
28
9-89

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Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design ☐											
Doc/Data ☐											
Equip/Tooling ☐											
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Material ☐											
Operator ☐											
Offset/Setup ☐											
Process ☐											
Supplier ☐											
Training ☐											
Transport ☐											
Unapproved ☐											

FAULT CATEGORY			
Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

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Page 3

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

D3542-1
D3542-1
Bracket

Manufactured No

105 Each

6.0000

Start Qty: 1.00
2

Required Qty: 1.00

DAS
33
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST245

6

104301

1

106807

5

Manufactured No

105 Each

16.0000

3

DAS
33
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST245

16

107215

8

113280

8

Manufactured No

105 Each

9.0000

2

DAS
33
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST245

9

105070

9

Manufactured No

105 Each

40.0000

6

DAS
33
9-89

14-05-14

Location

Loc Qty

Loc Code

ST245

38

106285

38

ST551

2

87687

2

106285

DAS
28
9-89

DAS
06
9-89

D3571-1
D3571-1
Guide

DAS
06
9-89

D3571-3
D3571-3
Guide

DAS
06
9-89

D3578-041
D3578-041
Doubler

DAS
06
9-89

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Page 3

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Handling/Pre									
Material									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

Start Qty: 1.00

Required Qty: 1.00

D3610-041

Manufactured No

105 Each

9.0000

2

DAS 28
33 9-89

D3610-041

Bracket
DAS
06
9-89

Location

Loc Qty

Loc Code

ST245A

9

104326

9

104326

D3618-1

Manufactured No

105 Each

88.0000

2

DAS 28
33 9-89

D3618-1

Cap

Location

Loc Qty

Loc Code

ST245

88

104537

88

104537

AN4-10A

Purchased No

105 Each

54.0000

4

DAS 28
33 9-89

AN4-10A

Bolt

DAS
06
9-89

Location

Loc Qty

Loc Code

ST355

54

M127815

54

127815

AN4-44A

Purchased No

105 Each

31.0000

2

DAS 28
33 9-89 14-05-14

AN4-44A

Bolt

DAS
06
9-89

Location

Loc Qty

Loc Code

ST359

31

122800

25

m126173

6

126173

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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Wednesday, May 07, 2014 1:15:18 PM

Page 5

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

MS24693-S274

Purchased

No

105

Each

94.0000

Start Qty: 1.00

2

Required Qty: 1.00

MS24693-S274

Screw

DAS
06
9-89

Location

Loc Qty

Loc Code

ST301

94

124670

94



124670

DAS
33
9-89

DAS
28
9-89

MS24694-S56

Purchased

No

105

Each

147.0000

MS24694-S56

SCREW

DAS
06
9-89

Location

Loc Qty

Loc Code

ST303

147

m126400

47

m128402

100



126400

DAS
33
9-89

DAS
28
9-89

MS24694-S58

Purchased

No

105

Each

85.0000

MS24694-S58

SCREW

DAS
06
9-89

Location

Loc Qty

Loc Code

ST303

85

123352

85



123352

DAS
33
9-89

DAS
28
9-89

MS24694-S60

Purchased

No

105

Each

50.0000

MS24694-S60

Screw

DAS
06
9-89

Location

Loc Qty

Loc Code

ST322

50

104407

50



104407

DAS
33
9-89

14-05-14

DAS
28
9-89

Wednesday, May 07, 2014 1:15:19 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____ _____ _____
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Picklist Print

Wednesday, May 07, 2014 1:15:19 PM

Page 6

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

NAS1149D0463J

Purchased

No

105

Each

6,700.000

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463.I

WASHER

DAS
06
9-89

Location

Loc Qty

Loc Code

ST510a

6700

M126221

20

M127813

22

M127904

3000

M128591

2158

M128995

1500

**

DAS

33

9-89

DAS

28

9-89

128591

NAS1149D0416J

Purchased

No

105

Each

492.0000

**

NAS1149D0416.I

WASHER

DAS
06
9-89

Location

Loc Qty

Loc Code

GA

119

m126254

119

ST293

300

m129022

300

ST294

73

m125773

11

m127832

62

DAS

33

9-89

1405-14

DAS

28

9-89

127832

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

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Page 7

Work Order ID: 119061

119061

Parent Item: D412-702-343

D412-702-343

Parent Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14

Required Date: 5/16/14

MS21042L4

Purchased

No

105

Each

7,152.000

Start Qty: 1.00

Required Qty: 1.00

MS21042L4
Locknut

**

DAS
33
9-89

DAS
28
9-89

DAS
06
9-89

Location

Loc Qty

Loc Code

ST314

44

m126015

12

m126275

32

ST509

7097

m127255

71

m127813

988

m128300

1038

m128798

5000

ST518

11

m127376

11

128300

CR3212-4-4

Purchased

No

105

Each

176.0000

12

12

CR3212-4-4
CHERRY RIVET

**

DAS
33
9-89

1405-14

Location

Loc Qty

Loc Code

ST328

176

m128062

176

128062

DAS
06
9-89

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3
REF TCCA STC SH04-7
REF FAA STC SR01997NY
REF EASA STC EASA.I.M.R.S.00710

This service instruction adds several kits equipped with improved inertia reels:

The Dart **D412-702-341** 13-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for all 13 passenger seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-041B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-343** 5-Man Forward Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5 forward facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-043B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-345** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 aft facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-045B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-347** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 side facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-047B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-349** 1-Man Shoulder Harness Kit provides a 3-point harness with an inertia reel and joined lap and shoulder belts for the center forward facing seating position in the aircraft cabin. The kit also contains hardpoints for securing the harness. The harness for this kit meets the requirements of TSO-C114 and replaces the existing lap belts. This kit should be installed similar to the D412-702-049B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-351** 1-man 3-point shoulder harness kits are available for the outboard seats of the 5-man forward facing bench in Bell 205/212/214/412 model aircraft. The kit can be installed LH or RH. These kits should be installed similar to the D412-702-051B/052B kits, as detailed in Table 1 of this service instruction.

The Dart **D214-702-337** 5-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder belts for the 5-man aft facing seat installed in the Bell 214B/B1 model aircraft. This kit should be installed similar to the D214-702-037B kit, as detailed in Table 1 of this service instruction.

The Dart **D205-702-353** 4-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder harnesses for the 4-man aft facing seat installed in the UH-1 model aircraft. This kit should be installed similar to the D205-702-053B kit, as detailed in Table 1 of this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

A	NEW ISSUE	CP	10.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9511	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		NEW SHOULDER HARNESS KITS	NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

INSTALLATION

The Dart D412-702-3XX kits should be installed similar to the kits in Installation Instructions IIN-D412-702 Rev. E or Dart Service Instruction (DSI) listed below:

TABLE 1

Part Number	Description	Install similar to:
D412-702-341	Shoulder Harness Kit	D412-702-041B (IIN-D412-702, DSI 9408)
D412-702-343	Shoulder Harness Kit	D412-702-043B (IIN-D412-702, DSI 9453 [214], DSI 9408)
D412-702-345	Shoulder Harness Kit	D412-702-045B (IIN-D412-702, DSI 9469)
D412-702-347	Shoulder Harness Kit	D412-702-047B (IIN-D412-702, DSI 9408)
D412-702-349	Shoulder Harness Kit	D412-702-049B (IIN-D412-702, DSI 9408)
D412-702-351	Shoulder Harness Kit	D412-702-051B (LH) (DSI 9397, DSI 9408) D412-702-052B (RH) (DSI 9397, DSI 9408)
D214-702-337	Shoulder Harness Kit	D214-702-037B (DSI 9454)
D205-702-353	Shoulder Harness Kit	D205-702-053B (DSI 9460)
D412-702-301	Harness Assembly	D412-702-101B (IIN-D412-702)
D412-702-303	Harness Assembly	D412-702-103B (IIN-D412-702)
D412-702-305	Harness Assembly	D412-702-105B (IIN-D412-702)
D412-702-307	Harness Assembly	D412-702-107B (IIN-D412-702)
D412-702-309	Harness Assembly	D412-702-109B (IIN-D412-702)
D412-702-311	Harness Assembly	D412-702-111B (IIN-D412-702)
D412-702-313	Harness Assembly	D412-702-113B (IIN-D412-702)
D412-702-315	Harness Assembly	D412-702-115B (IIN-D412-702)
D412-702-317	Harness Assembly	D412-702-117B (IIN-D412-702)
D412-702-319	Harness Assembly	D412-702-119B (DSI 9454)
D412-702-321	Harness Assembly	D412-702-121B (DSI 9454, DSI 9469)
D412-702-323	Harness Assembly	D412-702-123B (DSI 9454, DSI 9469)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION

BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	92	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	92	
CHECKED	1	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 2 OF 6
APPROVED	140	TITLE SCALE
DE APPR.	14	NEW SHOULDER HARNESS KITS NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

PARTS LIST

TABLE 2

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
X						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
	X					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
		X				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
			X			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
				X		D412-702-349	Dart 1-Man 3-Point Forward Shoulder Harness Kit
					X	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
1	1		1	1		D412-702-059	GROMMET KIT
9	5		4	1	1	D3761-1-041	HOOK AND LOOP STRIP (DSI 9408)
2	1		1			D412-702-301	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-7	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
2	1		1			D412-702-303	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-8	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
1	1			1		D412-702-305	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-1	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S273	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1				1	D412-702-307	HARNESS ASSEMBLY (NEW)
1*	1*				1*	D3573-3	ADAPTER
1*	1*				1*	D4088-041	SHOULDER HARNESS (NEW)
4*	4*				4*	MS24693S272	SCREW
4*	4*				4*	AN960JD10LL	WASHER
4*	4*				4*	MS21042L3	NUT
1	1					D412-702-309	HARNESS ASSEMBLY (NEW)
1*	1*					D3573-3	ADAPTER
1*	1*					D4088-041	SHOULDER HARNESS (NEW)
4*	4*					MS24693S272	SCREW
4*	4*					AN960JD10LL	WASHER
4*	4*					MS21042L3	NUT

* denotes that part is included in assembly above

continued next page...

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9511	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		NEW SHOULDER HARNESS KITS	NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
1		1				D412-702-311	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-1	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-313	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-2	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1			1			D412-702-315	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
1			1			D412-702-317	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
1		1				D412-702-321	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-3	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-323	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-4	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT

* denotes that part is included in assembly above

continued next page...

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9511	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		NEW SHOULDER HARNESS KITS	NTS
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...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
2	2					D3542-1	BRACKET
7	3		4	1		D3571-1	GUIDE
2	2					D3571-3	GUIDE
2		2				D3572-041	GUIDE ASSEMBLY
12	6		6	2		D3578-041	DOUBLER
2	2					D3610-041	BRACKET
2	2					D3618-1	CAP
4	4					AN4-10A	BOLT
2		2				AN4-16A	BOLT
4		4				AN4-25A	BOLT
4		4				AN4-27A	BOLT (DSI 9469)
2	2					AN4-44A	BOLT
2	2					MS24693S274	SCREW
3	3			1		MS24694S56	SCREW
10	2		8			MS24694S58	SCREW
1	1			1		MS24694S60	SCREW
26	6	20				AN960JD416	WASHER
4	4					AN960JD416L	WASHER
12	6	6				MS21042L4	NUT
24	12		12	4		CR3212-4-4	RIVET

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 5 OF 6
APPROVED		TITLE SCALE
DE APPR.		NEW SHOULDER HARNESS KITS NTS
DATE	10.03.18	COPYRIGHT ©2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

TABLE 3

QTY -337	QTY -353	Part Number	Description
X		D214-702-337	Dart 5-Man 3 Point Aft Facing Shoulder Harness Kit, for 214 Aircraft
	X	D205-702-353	Dart 4-Man 3 Point Aft Facing Shoulder Harness Kit, for UH-1 Aircraft
1	2	D412-702-311	HARNESS ASSEMBLY (NEW) --> SEE TABLE 2
1	2	D412-702-313	HARNESS ASSEMBLY (NEW) --> SEE TABLE 2
1		D412-702-321	HARNESS ASSEMBLY (NEW) --> SEE TABLE 2
1		D412-702-323	HARNESS ASSEMBLY (NEW) --> SEE TABLE 2
1		D412-702-319	HARNESS ASSEMBLY (NEW)
1*		D3925-041	BRACKET
1*		D4088-043	SHOULDER HARNESS ASSEMBLY (NEW)
4*		MS24694S50	BOLT
4*		AN960JD10L	WASHER
4*		MS21042L3	NUT
	1	D3572-043	GUIDE ASSY
	1	D3572-044	GUIDE ASSY
1		D3920-041	SEATBELT GUIDE ASSEMBLY
2		D3920-5	SEATBELT GUIDE
1	6	AN4-16A	BOLT
1		AN4-21A	BOLT
7		AN4-25A	BOLT
18	12	AN960JD416	WASHER
9	6	MS21042L4	NUT

* denotes that part is included in assembly above

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 10.03.22

CERT. NO.: SH04-7

ISSUE NO.: 3

DESIGN	92	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	92	
CHECKED	1	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 6 OF 6
APPROVED	149	TITLE SCALE
DE APPR.	149	NEW SHOULDER HARNESS KITS NTS
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DART AEROSPACE LTD.

REFERENCE ONLY

IIN-D412-702-2

Page 42 of 42

QTY -337	QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
X							D214-702-337	Dart 5-Man 3 Point Aft Facing Shoulder Harness Kit, for 214 Aircraft
	X						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
		X					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
			X				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
				X			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
					X		D412-702-349	Dart 1-Man 3-Point Forward Facing Shoulder Harness Kit
						X	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
	1	1		1	1		D412-702-059	GROMMET KIT
	2	1		1			D412-702-301	HARNESS ASSEMBLY
	2	1		1			D412-702-303	HARNESS ASSEMBLY
	1	1			1		D412-702-305	HARNESS ASSEMBLY
	1	1				1	D412-702-307	HARNESS ASSEMBLY
	1	1					D412-702-309	HARNESS ASSEMBLY
1	1		1				D412-702-311	HARNESS ASSEMBLY
1	1		1				D412-702-313	HARNESS ASSEMBLY
	1			1			D412-702-315	HARNESS ASSEMBLY
	1			1			D412-702-317	HARNESS ASSEMBLY
1							D412-702-319	HARNESS ASSEMBLY
1	1		1				D412-702-321	HARNESS ASSEMBLY
1	1	1	1				D412-702-323	HARNESS ASSEMBLY
	2	2				1	D3542-1	BRACKET
	7	3		4	1		D3574-1	GUIDE
	2	2				1	D3574-3	GUIDE
	2		2				D3572-041	GUIDE ASSEMBLY
	12	6		6	2		D3578-041	DOUBLER
	2	2				1	D3610-041	BRACKET
	2	2				1	D3618-1	CAP
				2			D3677-1	SPACER
	9	5		4	1	1	D3761-1041	HOOK AND LOOP STRIP
1							D3920-041	SEATBELT GUIDE ASSEMBLY
2							D3920-5	SEATBELT GUIDE
	4	4				2	AN4-10A	BOLT
1	2		2				AN4-16A	BOLT
1							AN4-21A	BOLT
7	4		4				AN4-25A	BOLT
	4		4				AN4-27A	BOLT
	2	2				1	AN4-24A	BOLT
18	26	6	20			3	AN960JD416	WASHER (OR NAS1149D0463J)
	4	4				2	AN960JD416	WASHER (OR NAS1149D0416J)
	24	12		12	4		AGR3212-4	RIVET
9	12	6	6			3	MS21042L4	NUT (OR MS21042-4)
				6			MS21069L3	ANCHOR NUT
	2	2				1	MS24693S274	SCREW
				2			MS24694S282	SCREW
	3	3			1		MS24694S56	SCREW
	10	2		8			MS24694S58	SCREW
	1	1			1		MS24694S60	SCREW

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Revision: A
 Date: 10.12.01

Work Order ID 119061

Wednesday, May 07, 2014 1:15:13 PM

119061

Page 1

Item ID: D412-702-343

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Shoulder Harness, 3 Point Attachment, Inertia Reel Continuous Belt, 5 Man Fwd Facing

Start Date: 5/08/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 5/16/14 Req'd Qty: 1.00

1

Customer:

Reference:

Run Start ***NR1***

Approvals:

Process Plans 

Date: 14-05-07

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9511	A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-702-343 CHG001								
105	Pick Kit	0.00							
105									
Packaging	Memo	0.00							
Packaging									
110	QC4- 100% Inspect kits for completeness	0.00							
110									
QC	Memo	0.00							
Quality Control									

MLJ 14-05-14